FIG. 1

FIG. 1A
FIG. 1B

FIG. 1A

100

10 — APPLY A PAIR OF WEIGHT FACTORS. GENERATE k+m+1 SLOT SEQUENCES.

11 — COMPUTE FIGURE OF MERIT FOR EACH SLOT.

12 — ARRANGE SLOTS OF EACH SLOT SEQUENCE IN THE ORDER OF DECREASING FIGURE OF MERIT.

14 — BEGIN WITH THE FIRST SLOT SEQUENCE.

16 — BEGIN WITH FIRST TIMESLOT IN THE SEQUENCE.

18 — START WITH THE CODE WITH THE SMALLEST SPREADING FACTOR.

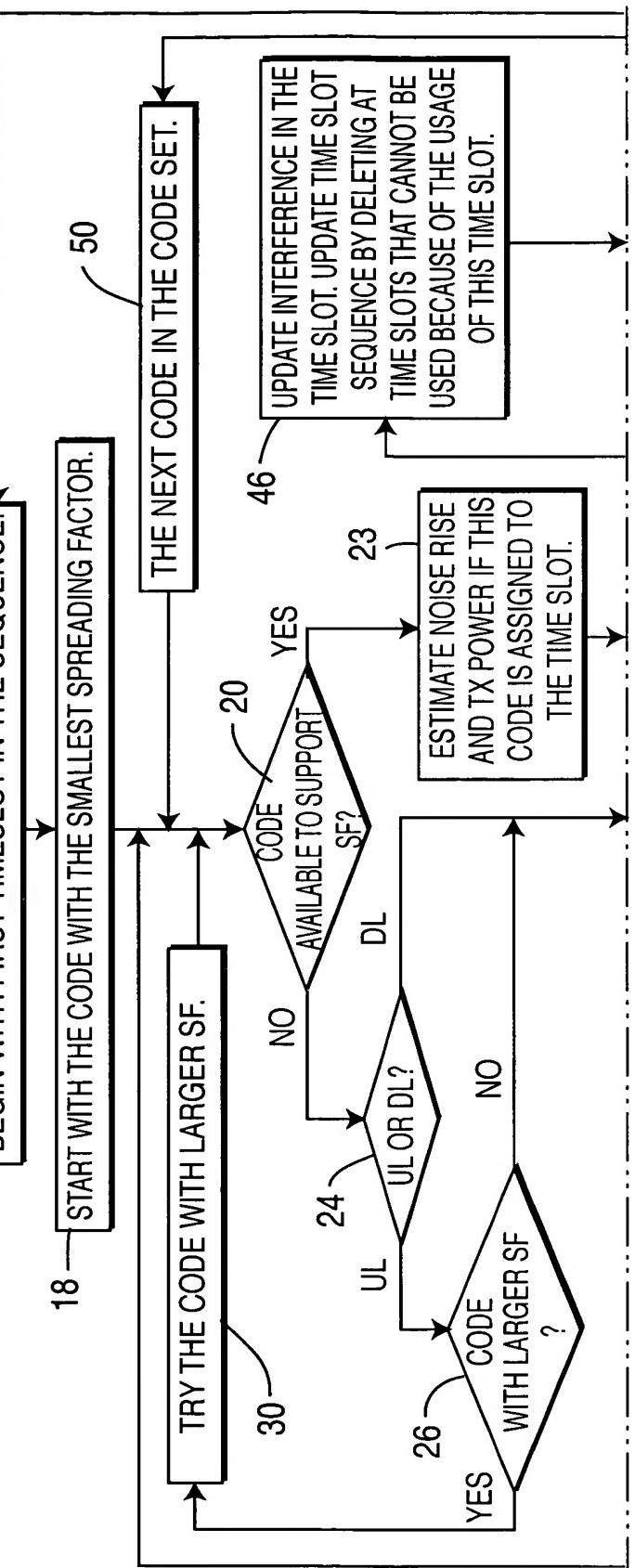50 — THE NEXT CODE IN THE CODE SET.

46 — UPDATE INTERFERENCE IN THE TIME SLOT. UPDATE TIME SLOT SEQUENCE BY DELETING AT TIME SLOTS THAT CANNOT BE USED BECAUSE OF THE USAGE OF THIS TIME SLOT.
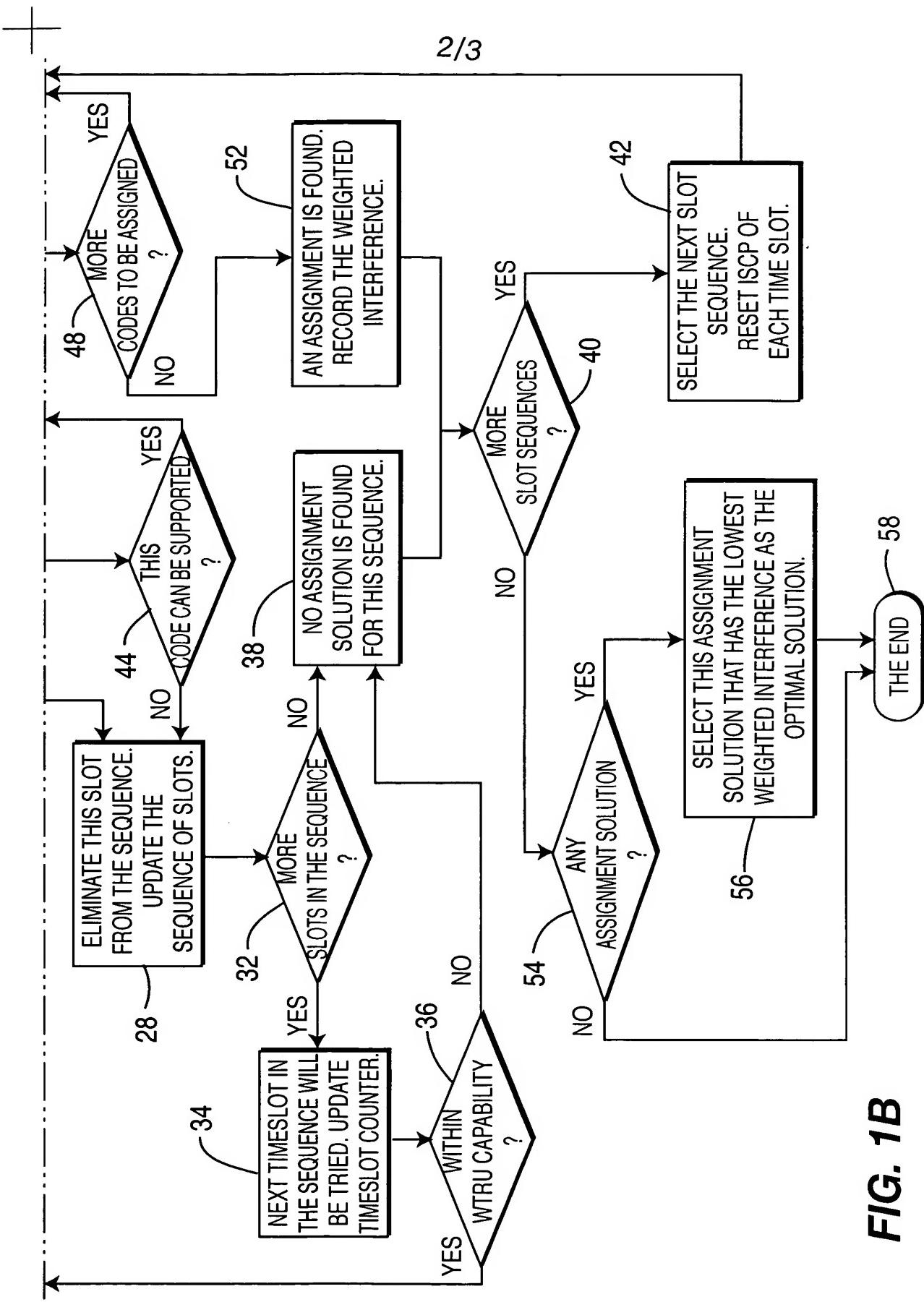
20 — CODE AVAILABLE TO SUPPORT SF?
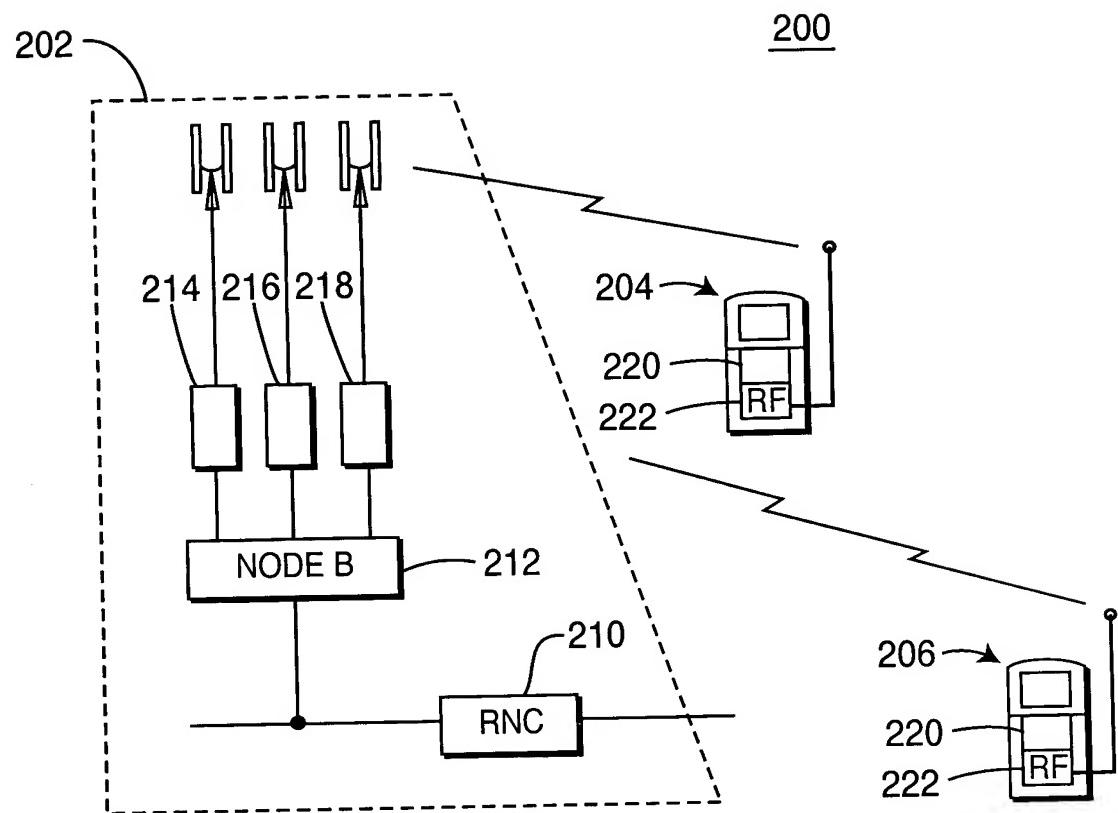
YES → 23 — ESTIMATE NOISE RISE AND TX POWER IF THIS CODE IS ASSIGNED TO THE TIME SLOT.

NO → 24 — UL OR DL?

DL

30 — TRY THE CODE WITH LARGER SF.

UL → 26 — CODE WITH LARGER SF?

YES

NO

48 MORE CODES TO BE ASSIGNED ? — YES

52 AN ASSIGNMENT IS FOUND. RECORD THE WEIGHTED INTERFERENCE.

44 THIS CODE CAN BE SUPPORTED ? — YES

28 ELIMINATE THIS SLOT FROM THE SEQUENCE. UPDATE THE SEQUENCE OF SLOTS.

38 NO ASSIGNMENT SOLUTION IS FOUND FOR THIS SEQUENCE.

40 MORE SLOT SEQUENCES ? — YES

42 SELECT THE NEXT SLOT SEQUENCE. RESET ISCP OF EACH TIME SLOT.

34 NEXT TIMESLOT IN THE SEQUENCE WILL BE TRIED. UPDATE TIMESLOT COUNTER.

32 MORE SLOTS IN THE SEQUENCE ?

36 WITHIN WTRU CAPABILITY ?

54 ANY ASSIGNMENT SOLUTION ?

56 SELECT THIS ASSIGNMENT SOLUTION THAT HAS THE LOWEST WEIGHTED INTERFERENCE AS THE OPTIMAL SOLUTION.

58 THE END

FIG. 1B

202

200

214 216 218

NODE B — 212

210

RNC

204

220
222
RF

206

220
222
RF

FIG. 2